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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,845	06/15/2001	Doug Grumann	10002695-1	8777

7590 04/10/2007

HEWLETT-PACKARD COMPANY
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EXAMINER	
TRUONG, LECHI	
ART UNIT	PAPER NUMBER
2194	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/882,845	GRUMANN, DOUG	
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-26 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **1-3, 5-15, 17-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al (US. Patent 6,059,842) in view of Li (US. Patent 6,144954).

5. **As to claim 1**, Dumarot teaches the invention substantially as claimed including: electronically deriving relationships (the optimizer contains rules 330, 341, 351 that it uses to makes such optimizations 330, 340 and recommendations 350. For example, If A1=yes, and S1 =200 MHz, or Mi=90%, then make suggestion and change the graphic card settings that control "synchronization on vertical refresh", col 7, ln 25-35/ comparing actual system/ application setting with recommend setting, col 7, ln 5-16), over time (changes to system and application configurations at different points in time, in evaluating the effects of changing application setting and in comparing actual system/application settings with recommended setting, col 7, ln 10-16/ at specific increments of time, col 5, ln 10-17), monitored variable/ performance (dynamically monitoring system behavior an performance, col 3, ln 16-22/ the optimizer 136 monitors system 12 behavior/ col 5, ln 47-55/ optimizer 136 gathers relevant system information/ relevant

application information, col 5, ln 30-46), genering a number of rules based on said derived relationship(the optimizer contains rules 330, 341, 351 that it uses to makes such optimizations 330, 340 and recommendations 350. For example, If A1=yes, and S1 =200 MHz, or Mi=90%, then make suggestion and change the graphic card settings that control "synchronization on vertical refresh", col 7, ln 25-35/ if A and B are true and C is false then make suggestion and take action, col 7, ln 30-35 /a rule may be: if A1= yes, S1=200 MHz or M1 = 90%, the rules is if A and B are true then C is false, col 7, ln 27-30/ ln 33-36), adjusting at least one of said system variable based on said generated number of rules (If A1 = yes, and S1 = 200MHz, or M1 = 90%, then make the suggestion and change the graphic car settings, col 7, ln 25-30/ parameter A1 may control the graphical quality of an engineering application's 3 D graphics. Lower graphical quality often implies farter use of an application. System setting 440(Fig. 4) contain information usually relating to static qualities of the computer system such the particular operating system, amount of memory, processor speed, graphics card name, and bios version, col 4, ln53-67 to col 5, ln 1-4), to enhance the performance (col 3, ln 10-25).

6. Dumarot does not teach automatically generating rules without requiring human interaction. However, Li teaches automatically generating rules without requiring human interaction (the machine-generated rules maybe:" If host strength is needed, Then in the order of decreasing effectiveness one should increase V... and If maximum percentage effect is need, THEN one should add V; and " IF maximum host strength is needed THEN use the following best combination, col 14, ln 40-47/. These rules can easily be codified and printed out with standard format, col 14, ln 52-54/ thus the self-optimizing machine readily and automatically generates these and other similar rules in computer coded form, col 14, ln 56-59/ To fully utilize

my self-optimizing machine, however, these expert " rules" are preferentially instantly and automatically implemented through actuators without introducing any delays or errors due to presence of humans in the loop, col 14, ln 63-67).

7. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Dumarot and Li because Li 's automatically generating rules without requiring human interaction would improve the efficiency of Dumorot's system by allowing self-optimizing method and machine to solve the main bottleneck in the development of expert system and to improve performance characteristics such as speed, memory size, reliability, operating cost without human guidance and intervention.

8. **As to claim 2,** Dumarot teaches at least in part on a performance goal (optimizing software, col 3, ln 10-45/ optimizing system performance, col 4, ln 56-67/col 5, ln 1-25/ col 6, ln 7-55/ col 7, ln 1-67/ col 8, ln 8-57).

9. **As to claim 3**, Dumarot teaches part on current values of said system variable (a set of control parameters A1, A2, col 4, ln 56-67/col 5, ln 1-25/ col 7, ln 1-67/ color 570, col 8, ln 7-60), recommend (recommendation 350, col 7, ln 1-67).

10. **As to claim 5**, Dumarot teaches acquired data (values M1, M2.. is obtained, col 5, ln 1-25).

11. **As to claim 6**, Dumarot teaches data over time (specific increments of time, col 5, ln 1-25), gathering said data (the information gathered, col 7, ln 1-67), logging/ logged data (threshold distance/ (X1, X2), col 9, ln 1-40), relationship (X1, Y1, col 9, ln 1-40).

12. **As to claim 7**, Dumarot teaches discrete points in time (different points in time, col 7, ln 1-67).

13. **As to claim 8**, Dumarot teaches an event (system behavior, col 5, ln 1-25).

14. **As to claim 9,** Dumarot teaches performance of metric data (performance, col 5, ln 1-25).

15. **As to claim 10**, Dumarot teaches identifying a number of applications (a particular unique identifier 410 for a software application, col 4, ln 56-67/ col 5, ln 1-25).

16. **As to claim 11**, Dumarot teaches variable (parameter, A1, A2.., col 4, ln 56-67) , the performance of said computer (increasing the apparent speed of computer, col 3, ln 9-15).

17. **As to claim 12,** it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.

18. **As to claim 13**, Dumarot teaches performance metrics (performance, col 5, ln 1-25).

19. **As to claim 14**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.

20. **As to claim 15**, Dumarot teaches performance goal (performance, col 5, ln 1-25).

21. **As to claim 17,** it is an apparatus claim of claim 5; therefore, it is rejected for the same reason as claim 5 above.

22. **As to claim 18**, Dumarot teaches a configuration file (amount of memory, col 5, ln 1-25).

23. **As to claim 19**, Dumarot teaches monitoring (monitor program 137, col 5, ln 1-67).

24. **As to claims 20**-26, they are apparatus claims of claims 9-10, 1, 5, 6; therefore, they are rejected for the same reasons as claims 9-10, 1, 5, 6 above.

25. Claims **4, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al (US. Patent 6,059,842), Li (US. Patent 6,144954), as applied to claim 1 above, and in view of Mihata (design rule verifying system).

26. **As to claim 4**, Dumarot and Li do not teach iterative. However, Mihata teaches iterative (the contradictory design rule are repeated, page 1).

27. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Dumarot, Li and Mihata because Mihata's iterative would improves the efficiency of Dumarot and Li's systems by allowing the system to repeat the prior step of the correcting work.

28. **As to claim 16,** it is an apparatus claim of claim 4; therefore, it is rejected for the same reason as claim 4 above.

Response to the argument

29. Applicant amendment filed on 10/05/2004 has been considered but they are not Persuasive.

In the remarks, applicant argued in substance

(1) " Dumarot does not teach or suggest electronically deriving relationships over time between monitored system variables and monitored performance ".

30. Examiner respectfully traversed Applicant' s remarks:

As to the point (1), Dumarot teaches determining the changes to system and application configuration at different points in time[over time], in evaluating the effects of changing application settings, and in comparing[relationships] actual system /application settings with recommended setting[monitored system variables and monitored performance](col 7, ln 11-16)/ the optimizer contains rules 331, 341, 351 that is uses to make such optimizations 330,340 and

recommendations 350. For example the rule may be: IF A1=yes, and S1=200 MHz, or M1=90%, then make suggestion and change the graphic card settings(col 7, ln 25-30).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

March 20, 2007

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER